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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/521,522	03/08/2000	David H Cox	50047590-0031	1086

26263 7590 09/24/2002

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EXAMINER

NI, SUHAN

ART UNIT PAPER NUMBER

2643

DATE MAILED: 09/24/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/521,522

Applicant(s)

COX ET AL.

Examiner

Suhan Ni

Art Unit

2643

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 8/22/02
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6-10 and 13-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6-10 and 13-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 July 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

1. Applicants' submission for CPA filed on 08/22/2002 has been entered.
2. This communication is responsive to the applicants' amendment filed on 07/02/2002 and entered on 09/06/2002.

Claim Objections

3. Claims 10-24 and 26-30 are objected to because of the following informalities:

Under line 1 of all claims, "The loud speaker". Should it be "loudspeaker"?

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) The invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

4. Claims 25 is rejected under 35 U.S.C. 102(e) as being anticipated by Azima et al. (US-6,377,695).

Regarding claim 25, Azima et al. disclose a loudspeaker component (Figs. 2, 2a) comprising: a first surface layer (10); a second layer (10) fixed to the first layer so as to defined a core (11) and a margin (7); and sound damping material disposed in the core (11), wherein the margin comprises a first flange and a second flange (Fig. 1), the core is completely encased by the first layer and the second layer as claimed.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 6-10, 13-24 and 26-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Azima et al. (US-6,377,695).

Regarding claim 6 and 27, Azima et al. disclose a loudspeaker component (Figs. 2, 2a) comprising: a first surface layer (10) made to have a predetermined boundary outline; a core layer (11) of sound-damping material made to have a predetermined outline smaller than that of said first layer so as to form a peripheral margin (7) of said first layer; and a second surface layer (10) having an outline similar to said first layer and located in substantial registration therewith, bonded to said first layer in the peripheral margin so as to form a sealing core region containing said core layer (Figs. 2, 2a). But Azima et al. do not clearly teach that both layers are made of a molding material as claimed. Since Azima et al. do suggest to providing a plastic material for the peripheral margin (col. 3, lines 3-16) and providing a molding material for an acoustic panel cover layer is very well known in the art, it therefore would have been obvious to one skilled in the art at the time the invention was made to provide a molding material, such as plastic material for the first and second layers of the component as an alternate choice, in order to manufacture the loudspeaker component and implement the invention as well.

Regarding claims 7 and 24, Azima et al. do not clearly teach a thermosetting resin with fiberglass reinforcement as claimed. Since providing a thermosetting resin with fiberglass

reinforcement as a molding material for an acoustic panel cover layer is very well known in the art, it therefore would have been obvious to one skilled in the art at the time the invention was made to provide a thermosetting resin with fiberglass reinforcement as a molding material for the first and second layers of the component as an alternate choice, in order to make the loudspeaker component more durable.

Regarding claims 8 and 16-20, Azima et al. do not clearly teach a damping material as claimed. Since providing certain desirable material as a damping material for an acoustic panel core layer is very well known in the art, it therefore would have been obvious to one skilled in the art at the time the invention was made to provide a damping material, such as a silicon rubber as a damping material for the core layer of the loudspeaker component as an alternate choice, in order to obtain certain desirable acoustic characteristics.

Regarding claim 9, Azima et al. disclose a loudspeaker component (Figs. 2, 2a) comprising: a first surface layer (10); a second layer (10) fixed to the first layer so as to defined a core (11) and a margin (7); and sound damping material disposed in the core (11), wherein the margin comprises a first flange and a second flange (Fig. 1), the core is completely encased by the first layer and the second layer, both layers and sound damping material comprise a three-layer laminate as claimed. But Azima et al. do not clearly teach a throat shaped configuration as claimed. Since Azima et al. do not restrict the utilization of the loudspeaker component for any specific application, it therefore would have been obvious to one skilled in the art at the time the invention was made to provide any desirable configuration, such as a throat shaped configuration for the loudspeaker component as an alternate choice, in order to utilize the loudspeaker component in many different applications.

Regarding claims 10, 14, 23, 26 and 29, Azima et al. do not clearly teach a trapezoid configuration as claimed. Since Azima et al. do not restrict the utilization of the loudspeaker component for any specific application, it therefore would have been obvious to one skilled in the art at the time the invention was made to provide any desirable configuration, such as a trapezoid configuration for the loudspeaker component as an alternate choice, in order to utilize the loudspeaker component in certain applications.

Regarding claim 13, Azima et al. further disclose the loudspeaker component, wherein the first and second flanges are defined by a first and a second state (Figs. 2, 4) as claimed.

Regarding claims 15 and 28, Azima et al. further disclose the loudspeaker component, wherein the layers comprise a no more than three-layer laminate (Fig. 2).

Regarding claims 21-22 and 30, Azima et al. do not clearly teach a thickness for each of the layers as claimed. Since Azima et al. do not restrict the thickness for each of the layers, it therefore would have been obvious to one skilled in the art at the time the invention was made to provide each layer with desirable thickness, such as an equal thickness for each of the layers, for the loudspeaker component as an alternate choice, in order to utilize the loudspeaker component in certain applications and obtain specific acoustic effects.

Response to Amendment

6. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Suhan Ni** whose telephone number is **(703)-308-9322**, and the

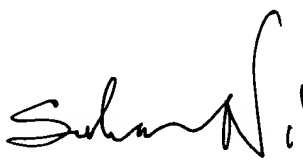
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number for fax machine is (703)-305-9508. If it is necessary, the examiner's supervisor, **Curtis Kuntz**, can be reached at (703) 305-4708.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is (703) 305-3900.

SN

September 22, 2002


SUHANNI
PATENT EXAMINER